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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,638	09/12/2003	Katsuhisa Yamazaki	02910.000079.	7561
5514	7590	04/11/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			DOTE, JANIS L	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/660,638

Applicant(s)

YAMAZAKI ET AL.

Examiner

Janis L. Dote

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1. The examiner acknowledges the cancellation of claim 2 and the amendments to claims 1 and 4 set forth in the amendment filed on Jan. 10, 2005. Claims 1 and 3-17 are pending.

2. The replacement drawing sheet of Fig. 2 was received on Jan. 10, 2005. The replacement drawing sheet is acceptable.

3. The objection to the drawings set forth in the office action mailed on Sep. 8, 2004, paragraph 1, has been withdrawn in response to the replacement drawing sheet of Fig. 2 filed on Jan. 10, 2005.

The objection to the abstract set forth in the office action mailed on Sep. 8, 2004, paragraph 2, has been withdrawn in response to the substitute specification filed on Jan. 10, 2005.

The objections to the specification set forth in the office action mailed on Sep. 8, 2004, paragraph 3, have been withdrawn in response to the substitute specification filed on Jan. 10, 2005, which corrected the typographic errors in the originally filed specification and capitalized the trademarks disclosed in the originally filed specification.

The objection to the specification set forth in the office action mailed on Sep. 8, 2004, paragraph 4, has been withdrawn

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in response to the substitute specification filed on Jan. 10, 2005, which added the toner weight average particle size limitation recited in originally filed claim 16. See the substitute specification, page 68, lines 18-20.

The rejections of claims 1-17 under 35 U.S.C. 112, second paragraph, set forth in the office action mailed on Sep. 8, 2004, paragraph 6, have been withdrawn in response to the amendment filed on Jan. 10, 2005, to claim 4, and in response to the substitute specification, adding the subject matter disclosed in paragraphs 0055C and 0055D.

The rejections of claims 1, 5, and 7-16 under 35 U.S.C. 102(b) over US 2001/0028988 A1 (Magome), of claims 2-4 and 16 [sic: 17] under 35 U.S.C. 102(b)/103(a) over Magome, and of claim 6 under 35 U.S.C. 103(a) over Magome combined with the other cited prior art, set forth in the office action mailed on Sep. 8, 2004, paragraphs 11-14, have been withdrawn in response to the amendment filed on Jan. 10, 2005, to claim 1, adding the limitation that the "rate of liberation 'b' of the inorganic fine particle from the toner particle is 0.80 to 1.90%" and the limitation of cancelled claim 2 that "when a wetability of the developer with respect to a methanol/water mixed solvent is measured using as an index of the wetability, a transmissivity of light having a wavelength of 780 nm through the mixed solvent

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concentration, a methanol concentration in the mixed solvent at the transmissivity of 80% is in a range of 35 to 80% by volume."

As discussed in paragraph 11, the Magome toner 26 comprises hydrophobic silica particles and conductive fine particles. See paragraphs 0403-0409, 0486, and 0487; and Table 3 in paragraph 0632, toner 26. The rate of liberation of the hydrophobic silica particles is 2.18%, and the rate of liberation of the conductive zinc oxide particles is 53.6%. The rate of liberation is defined as a percentage of the number of light emissions of "only metal" atoms associated with the silica or conductive powder, determined by the particle analyzer PT1000 with respect to the sum of the number of light emissions of the metal atoms "having emitted light simultaneously with carbon atoms" associated with the toner particles determined by the particle analyzer PT1000 and the number of light emissions of "only metal" atoms. See paragraphs 0249 and 0254. The Magome numerical value of rate of liberation of the hydrophobic silica particles is outside the range of 0.80 to 1.90% recited in instant claim 1. In addition, Magome does not disclose or suggest that its developer has the wetability as recited in instant claim 1.

The rejection of claims 1, 8, 9, and 13-16 under the judicially created doctrine of obviousness-type double patenting

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over claims 1-34 of U.S. Patent No. 6,596,452 B2 (Magome), set forth in the office action mailed on Sep. 8, 2004, paragraph 16, has been withdrawn in response to the amendment filed on Jan. 10, 2004, to claim 1 described supra. The claims of Magome do not recite the wetability limitation now recited in instant claim 1.

4. The substitute specification filed on Jan. 10, 2005, is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The disclosures in added paragraphs 0055C and 0055D lack antecedent basis in the originally filed specification.

The added paragraph 0055C discloses that the "total emission of an element constituting the conductive fine particle is obtained based on the emission of an element constituting the conductive fine particle within 2.6 msec after an emission of a carbon atom and the emission of an element constituting the conductive fine particle which emits later than 2.6 msec after an emission of a carbon atom . . . the rate of liberation 'a' of the conductive fine particles is defined based on the total

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emission of an element constituting the conductive fine particle and the emission of an element constituting the conductive fine particle which emits later than 2.6 cosec [sic: msec] after an emission of a carbon atom."

The added paragraph 0055D discloses that the "total emission of an element constituting the inorganic fine particle is obtained based on the emission of an element constituting the inorganic fine particle within 2.6 msec after an emission of a carbon atom and the emission of an element constituting the inorganic fine particle which emits later than 2.6 msec after an emission of a carbon atom . . . the rate of liberation 'b' of the inorganic fine particles is defined based on the total emission of an element constituting the inorganic fine particle and the emission of an element constituting the inorganic fine particle which emits later than 2.6 msec after an emission of a carbon atom."

Applicants assert that the originally filed specification at page 25, line 5, to page 27, line 2, i.e., paragraphs 0055 and 0056, provides antecedent basis for the disclosures in added paragraphs 0055C and 0055D. However, the originally filed specification does not define the rate of liberation "a" or the rate of liberation "b" as disclosed in the added paragraphs. The originally filed specification at page 25, line 5, to

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page 27, line 2, discloses that the number of inorganic powder or conductive powder liberated from the toner particles is determined from the number of light emissions of "only atoms" associated with the inorganic or conductive powder, such as Si, measured by the particle analyzer PT100. The number of inorganic or conductive powder present on the surface of the toner particles is determined from the number of light emissions of atoms, such as Si, which are emitted simultaneously with light emissions of carbon atoms that are associated with the toner particles, measured by the particle analyzer PT100. The originally filed specification does not provide any definitions of the rate of liberation "a" and the rate of liberation "b", let alone the definitions disclosed in added paragraphs 0055C and 0055D.

Applicants are required to cancel the new matter in the reply to this Office Action.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.



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6. Claims 1 and 3-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Instant claim 1 and claims dependent thereon recite that the conductive fine particle and the inorganic fine particle in the developer have a rate of liberation "a" of 40 to 95% and a rate of liberation "b" of 0.80 to 1.90%, respectively.

The substitute specification filed on Jan. 10, 2005, defines the rates of liberation in added paragraphs 0055C and 0055D as described in paragraph 4 above. However, for the reasons discussed in paragraph 4, which are incorporated herein by reference, the originally filed specification does not provide an adequate written description of the definitions of the rates of liberation now disclosed in the added paragraphs.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1 and 3-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 and claims dependent thereon are indefinite in the phrases "rate of liberation 'a' . . . is 40 to 95%" and "rate of liberation 'b' . . . of 0.80 to 1.90%" because it is not clear what is meant by the term "rate of liberation." The added paragraph 0055C in the substitute specification filed on Jan. 10, 2005, discloses that the "rate of liberation 'a' of the conductive fine particles is defined based on the total emission of an element constituting the conductive fine particle and the emission of an element constituting the conductive fine particle which emits later than 2.6 cosec [sic: msec] after an emission of a carbon atom." The added paragraph 0055D in the substitute specification filed on Jan.10, 2005, discloses that the "rate of liberation 'b' of the inorganic fine particles is defined based on the total emission of an element constituting the inorganic fine particle and the emission of an element constituting the inorganic fine particle which emits later than 2.6 msec after an emission of a carbon atom." Although the passages describe a

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general dependence, it is not clear that the rates of liberation must be ratios of the emission of the respective element emitted later than 2.6 msec after the emission of a carbon atom to the sum of the emission of the element, which is defined as sum of the emission of the element emitted later than 2.6 msec after the emission of a carbon atom and the emission of the element emitted within 2.6 msec after the emission of a carbon atom; or some other function of the total emission of the element and the emission of the element emitted after 2.6 msec after the emission of a carbon atom.

9. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The central fax phone number is (703) 872-9306.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLD

Apr. 5, 2005

*Janis L. Dote*  
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